AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Water Act, as amended, (M.G.L. Chap. 21, §§ 26-53)

Yankee Atomic Electric Company
19 Midstate Drive
Suite 200
Auburn, MA 01501

is authorized to discharge from the facility located at

Yankee Nuclear Power Station
49 Yankee Road
Rowe, Massachusetts 01367

to receiving water named: Sherman Reservoir and the Deerfield River
(Basin Code MA33-01)

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on the date of signature.

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This permit supercedes the permit issued on August 17, 1988

This permit consists of 10 pages in Part I including effluent limitations, monitoring requirements, and state permit conditions, Permit Attachment A, Sampling Locations, and 35 pages in Part II including General Conditions and Definitions.

Signed this 25th day of July, 2003

/Signature on File/

Linda M. Murphy, Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of the permit and lasting through expiration, the permittee is authorized to discharge through **outfall serial number 001A[2]:** auxiliary service (non-contact cooling) water, and test tank waters[1]. Discharges from the release of internal Outfall 001B will also be discharged. Such discharge shall be limited and monitored by the permittee as specified below:

OUTFALL 001A

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type[3]
Flow Rate (million gallons per day)	Report	0.22 MGD	1/Day	Estimate
Total Suspended Solids (TSS)	Report mg/l	100 mg/l	1/Quarter	Grab
pH range[6] (SU)	6.5 to 8.3 SU		1/Quarter	Grab

2. During the period beginning on the effective date of the permit and lasting through expiration, the permittee is authorized to discharge through **outfall serial number 001B:** spent fuel pool water. Such discharge shall be limited and monitored by the permittee as specified below:

OUTFALL 001B INTERNAL MONITORING POINT - SPENT FUEL POOL WATER

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type[3]
Flow Rate (gallons per day)[7]	**********	14,400 GPD	Continuous	Meter
Total Boron[8]	**********	850 mg/l	1/Batch	Grab
pH range (SU)	Monitor Only		1/Batch	Grab
River Flow (Cubic Feet Per Second)	57 CFS		1/Batch	Instantaneous (Minimum)

3. During the period beginning on the effective date of the permit and lasting through expiration, the permittee is authorized to discharge through **outfall serial number 003:** storm water, construction dewatering and demineralized effluent [2,10,11]. Such discharge shall be limited and monitored by the permittee as specified below:

OUTFALL 003

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type[3,4,5]
Flow Rate (million gallons per day)	********** *	Report MGD	1/6 Months	Estimate
Total Suspended Solids -TSS (mg/l)	********** *	100 mg/l	1/6 Months	Grab
Oil and Grease (mg/l)	********** *	15 mg/l	1/6 Months	Grab
pH range (Standard Units - S. U.)	Report SU		1/6 Months	Grab

4. During the period beginning on the effective date of the permit and lasting through expiration, the permittee is authorized to discharge through **outfall serial number 004:** storm water, construction dewatering and demineralized effluent [2,10,11]. Such discharge shall be limited and monitored by the permittee as specified below:

OUTFALL 004

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type[3,4,5]
Flow Rate (million gallons per day)	********** *	Report MGD	1/6 Months	Estimate
Total Suspended Solids -TSS (mg/l)	********** *	100 mg/l	1/6 Months	Grab
Oil and Grease (mg/l)	********** *	15 mg/l	1/6 Months	Grab

pH range (Standard Units - S. U.)	Report SU	1/6 Months	Grab

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (CONTINUED)

5. During the period beginning on the effective date of the permit and lasting through expiration, the permittee is authorized to discharge through **outfall serial number 005:** storm water. Such discharge shall be limited and monitored by the permittee as specified below:

OUTFALL 005

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type[3,4,5]
Flow Rate (million gallons per day)	********** *	Report MGD	1/6 Months	Estimate
Total Suspended Solids -TSS (mg/l)	********** *	100 mg/l	1/6 Months	Grab
Oil and Grease (mg/l)	********** *	15 mg/l	1/6 Months	Grab
pH range (Standard Units - S. U.)	Report SU		1/6 Months	Grab

6. During the period beginning on the effective date of the permit and lasting through expiration, the permittee is authorized to discharge through **outfall serial number 006:** Screen well sump water[9] . Such discharge shall be limited and monitored by the permittee as specified below:

OUTFALL 006

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type[3]
Flow Rate (Gallons per day)	********** *	Report GPD	1/Month	Estimate
pH range (Standard Units - S. U.)	Report SU		1/Year	Grab

Footnotes:

1) Test tank water shall include process waste waters that are either discharges of evaporator distillate or discharges of processed waste water following demineralization through a mixed bed demineralizer and associated particulate filtration. Discharges may occur in either batch mode through various “test tanks” or continuously following processing.

2) Should Outfall 001A not be available due to demolition activities, discharges may be made to Outfall 003 or Outfall 004 (with the exception of 001B discharges). Any such discharge shall meet Outfall 001A physical and chemical regulatory limits as specified. The permittee is required to notify EPA/DEP with the monthly Discharge Monitoring Reports when Outfall 001 is not available and discharges are to be redirected through Outfall 003 and/or Outfall 004.

3) All samples shall be tested using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136. The permittee shall submit the results to EPA of any additional testing done to that required herein if it is conducted in accordance with EPA approved methods, consistent with the provisions of 40 CFR §122.41(l)(4)(ii). See Permit Attachment A for Sampling Locations. Any change in sampling location(s) must be reviewed and approved in writing by EPA and MADEP.

4) At each outfall, grab samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The grab samples shall be taken during the first thirty minutes of the discharge. If collection of the grab sample(s) during the first thirty minutes is impracticable, grab sample(s) can be taken as soon after that as possible, and the permittee shall submit with the monitoring report a description of why the collection of the grab sample(s) during the first thirty minutes was impracticable. When a permittee is unable to collect grab sample(s) due to adverse climatic conditions, the permittee must submit in lieu of sampling data a description of why the grab sample(s) could not be collected, including available documentation of the event. Adverse weather conditions which may prohibit the collection of sample(s) include weather conditions that pose a danger to personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of sample(s) impracticable (drought, extended frozen conditions, specified storm event did not occur during sampling period, etc.). A "no discharge" report shall be submitted for those quarters in which there is no discharge.

   This permit shall be modified, or alternatively, revoked and reissued to incorporate additional testing requirements, including chemical specific limits, if results of the storm water analyses indicate the discharge causes an exceedance of any State water quality criterion. Results from these storm water analyses are considered "New Information" and the permit may be modified as provided in 40 CFR Section 122.62(a)(2).

5) Storm water volumes may be calculated by multiplying the total rainfall for a sampled event monitoring duration, by the estimated drainage areas for the outfall, converted to gallons. Flow rates are to be estimated by dividing the runoff volume by the storm event monitoring duration.

6) pH shall be in the range of 6.5 through 8.3 standard units and not more than 0.5 units outside the background range. There shall be no change from the background condition that would impair any use assigned to this class. The pH of the intake water from the Sherman Reservoir is occasionally below the lower pH limit of 6.5 SU. The permittee may take a pH grab sample from the forebay for comparison with the effluent pH sample. If the two sample results are within 0.5 SU of each other, an effluent pH sample result of less than 6.5 will not be considered an pH range violation. Measurements of pH at Outfall 001A shall be obtained within 60 minutes of the initiation of each discharge event from Outfall 001B for compliance.

7) The permittee may discharge up to a maximum of 14,400 GPD until all Spent Fuel Pool and associated rinse water has been discharged. The discharge need not be over consecutive days and may be continuous or batch mode. Daily discharge volume may be less to ensure compliance with the pH limits at Outfall 001A. pH of the pool shall be sampled prior to each batch or discharge event. The permittee **shall not discharge** Spent Fuel Pool water when the Deerfield River flow is below **57 cfs (36.8 MGD)**.

8) The boron limit is based on the average boron concentration within the Spent Fuel Pool. No additional boron may be added to the Spent Fuel Pool.

9) The screen well sump area shall be inspected weekly for any evidence of oil or debris. Sump water shall not be manually discharged to the receiving water unless free from contamination. No oils, solvents, or potential contaminants shall be stored in the Screen Well House. The sump well floor shall be kept clean through routine maintenance.

10) The Permittee is authorized to discharge Construction Dewatering, ground water and/or storm water that may collect in building foundations or excavations, as a result of the dismantlement of buildings and related structures. The discharge from dewatering will be controlled using Best Management Practices (BMP) common to construction dewatering activities and regulatory requirements. Dewatering effluent shall meet the effluent limits established for Outfall 003 and/or Outfall 004.

11) The Permitee is authorized to discharge effluents originating from a portable demineralizer. The effluent, which is composed of make-up water from Sherman Reservoir or demineralizer rinse water is intermittent and will have a flow of 4,000 GPD over a two day period. This activity shall occur once during decommissioning.

Part I.A. (Continued)

a. There shall be no discharge of floating solids or visible foam in other than trace amounts.

b. Pollutants which are not limited by this permit, but which have been specifically disclosed in the permit application, may be discharged up to the frequency and level disclosed in the application, provided that such discharge does not violate Section 307 or 311 of the Clean Water Act (CWA) or applicable state water quality standards.

c. The effluent shall not contain materials in concentrations or in combinations which are hazardous or toxic to aquatic life or which would impair the uses designated by the classification of the receiving waters.

d. Discharges to the Deerfield River shall be adequately treated to insure that the surface water remains free from pollutants in concentrations or combinations that settle to form harmful deposits, float as foam, debris, scum or other visible pollutants. They shall be adequately treated to insure that the surface waters remain free from pollutants which produce odor, color, taste, or turbidity in the receiving water which is not naturally occurring and would render it unsuitable for its designated uses.

e. There shall be no discharge of polychlorinated biphenyl compounds such as commonly used for transformer fluid and paints.

f. There shall be no discharge of biocides.

g. The discharge of radioactive materials shall be in accordance with the Nuclear Regulatory Commission requirements (10 CFR §20).

h. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe (40 CFR §122.42):

(1) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"

(a) One hundred micrograms per liter (100 ug/l);

(b) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or

(c) Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and Massachusetts regulations.

(2) That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"

(a) Five hundred micrograms per liter (500 ug/l);

(b) One milligram per liter (1 mg/l) for antimony;

(c) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or

(d) Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and Massachusetts regulations.

(3) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

Special Condition

Within three months of the effective date of the permit, the permittee is required to evaluate the flow velocity at the existing filter and if a technology is available, reduce the approach velocity consistent with EPA guidance to minimize potential impingement. Technologies to be evaluated should include additional screening.

B. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

The permittee shall maintain current and implement the Storm Water Pollution Prevention Plan, Yankee Atomic Electric Company Document No. 2DD-4 (Dated January, 2003), as revised and the Storm Water Pollution Prevention Inventory, Evaluation and Inspection, Yankee Atomic Electric Company Document No. DP-9748 (Dated January, 2003), as revised. The SWPPP for this facility shall address BMPs for the control of pollutants to ensure compliance with the terms of the permit. The SWPPP shall be updated as needed to identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from this facility. In addition, the SWPPP and Pollution Prevention Inventory shall describe the implementation of practices to reduce the pollutants in storm water discharges associated with industrial activity and to assure compliance with the terms and conditions of this permit.

C . MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate discharge monitoring report (DMR) forms postmarked no later than the 15th day of the month following the effective date of the permit.

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

U.S. Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114

The State Agency is:

Massachusetts Department of Environmental Protection
436 Dwight Street, Suite 402
Springfield, MA 01103

In addition, copies of all Discharge Monitoring Reports shall be submitted to the following address:

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street
Worcester, MA 01608

D. STATE PERMIT CONDITIONS

This discharge permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (DEP) under federal and state law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MA DEP pursuant to M.G.L. Chap. 21, §43.

Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared, invalid, illegal or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as an NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.